



**PROJECT REPORT**  
**QUEUE VISUALIZATION USING COMMON**  
**GATEWAY INTERFACE**

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**2017**

## APPROVAL AND RATIFICATION PAGE

QUEUE VISUALIZATION USING COMMON GATEWAY INTERFACE

by

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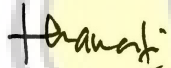
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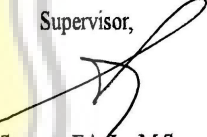
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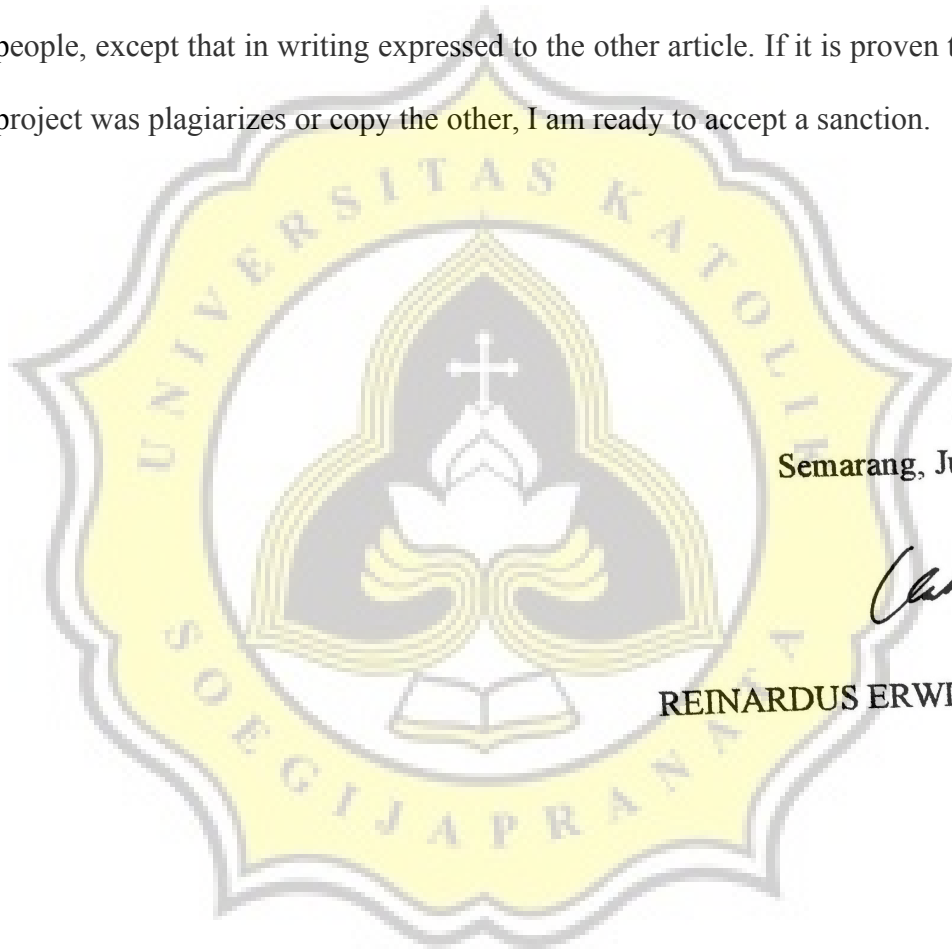
## STATEMENT OF ORIGINALITY

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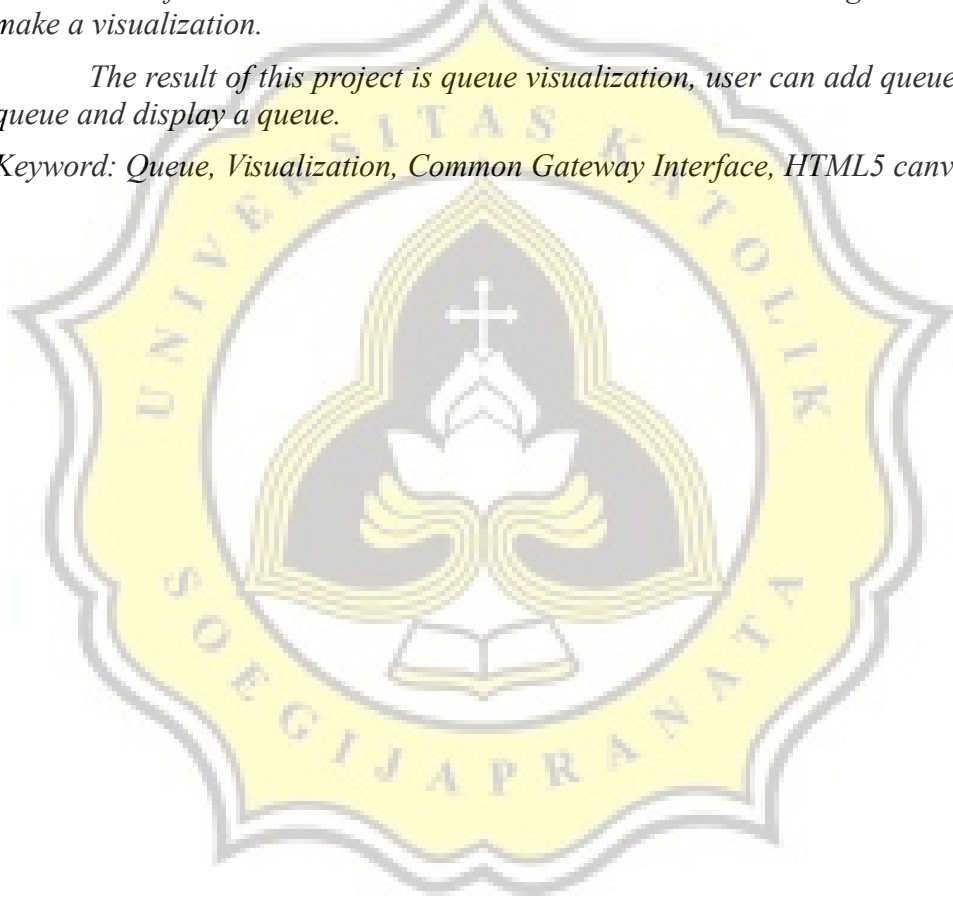
## ABSTRACT

*Data structures is the basic courses in computer science. However, students find it difficult in learning data structures. The application of A data structures visualization can help students to understand. This project is a visualization of a queue data structures.*

*The author creates this queue visualization using cgi (common gateway interface) programming and canvas HTML5. The cgi program is written in /var/www/cgi-bin folder and executed by apache server. This code makes a canvas code for browser. Then the canvas code draws a rectangle and line to make a visualization.*

*The result of this project is queue visualization, user can add queue, call a queue and display a queue.*

*Keyword: Queue, Visualization, Common Gateway Interface, HTML5 canvas.*



## **PREFACE**

Chapter 1 contains the background of the queue visualization using common gateway interface programming, the scope of this project, objective of this project

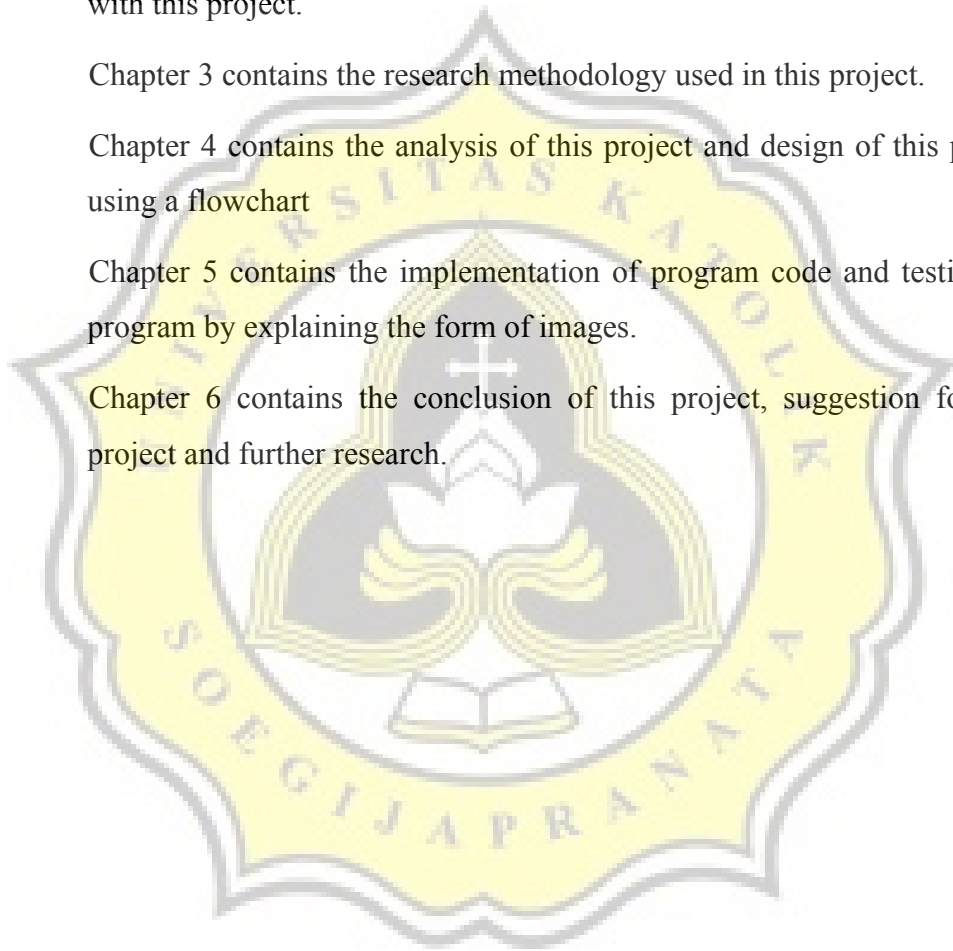
Chapter 2 contains some journal visualization of data structures associated with this project.

Chapter 3 contains the research methodology used in this project.

Chapter 4 contains the analysis of this project and design of this project using a flowchart

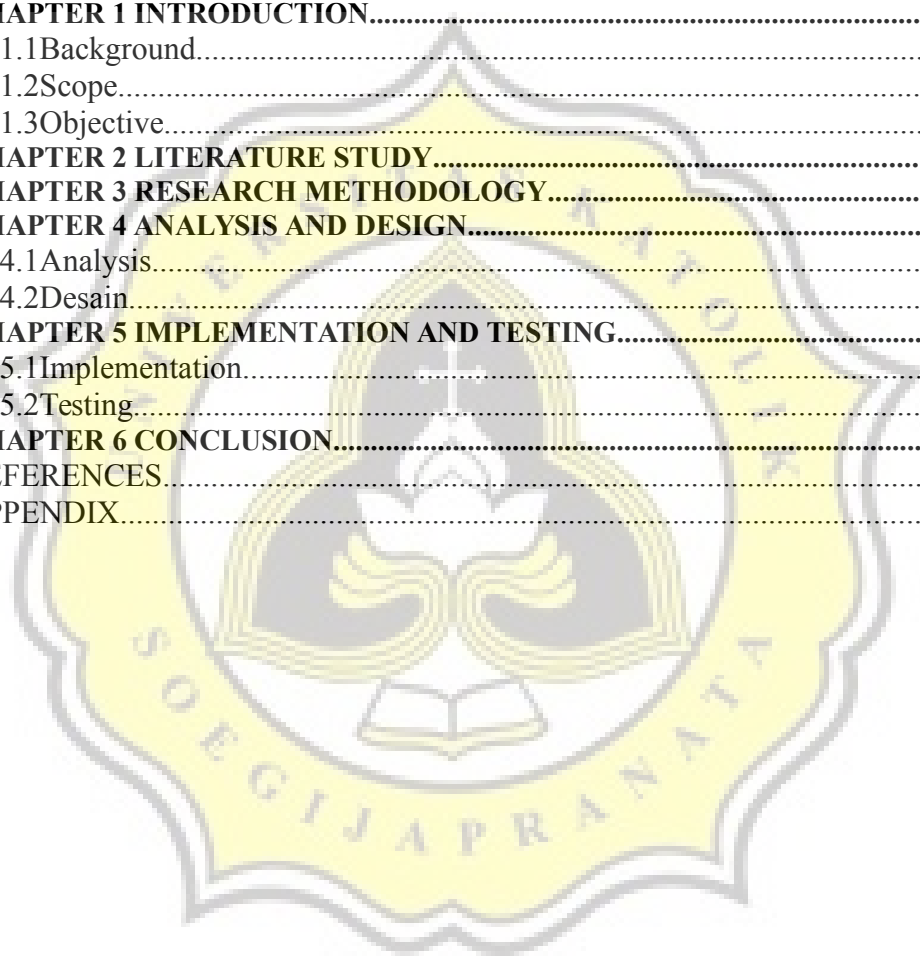
Chapter 5 contains the implementation of program code and testing the program by explaining the form of images.

Chapter 6 contains the conclusion of this project, suggestion for this project and further research.



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